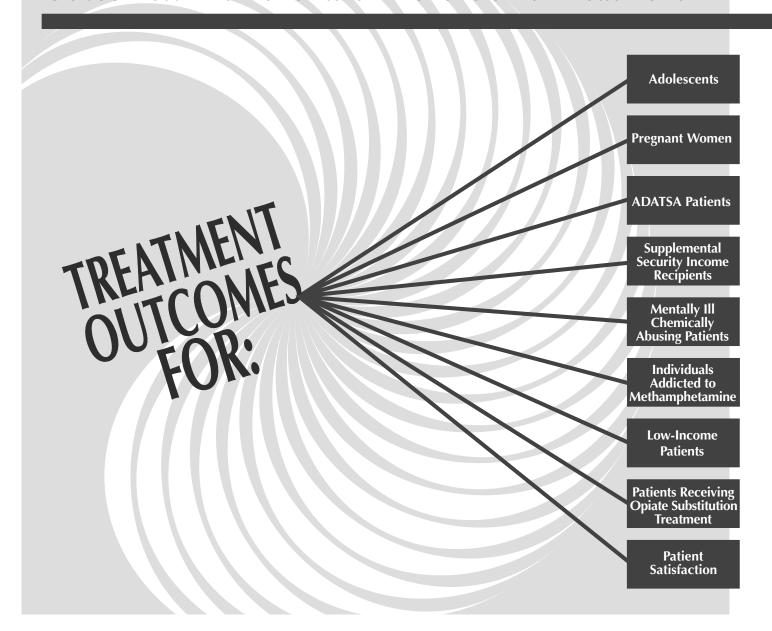
Outcomes: The Benefits of Prevention & Treatment





The Work of the DASA Research and Evaluation Section

The Division of Alcohol and Substance Abuse's (DASA's) Research and Evaluation Section was created to respond to the need to demonstrate the effectiveness of substance abuse prevention and treatment in serving the overall mission of the Department of Social and Health Services (DSHS), "to improve the quality of life for individuals and families in need." Through research and evaluation activities, DASA is able to document the role of alcohol- and drug-related services in enhancing client self-sufficiency; protecting vulnerable adults, children, and families; and assuring public safety and helping to build strong, healthy communities. Research also aids in the development of "best practices" that can be utilized by chemical dependency treatment providers in improving the quality of care, and provides the scientific basis for the development of sound public policy.

DASA's productivity in research and evaluation is due, at least in part, to the strong partnership it has developed with the research community over the last decade. This is most evident in the 90-member Research Subcommittee of the Citizens Advisory Council on Alcoholism and Drug Addiction. Members are drawn from research institutions throughout the Northwest. DASA also coordinates a statewide "Bridging the Gaps" workgroup, which seeks to forge new partnerships among researchers, prevention and treatment providers, and policymakers.

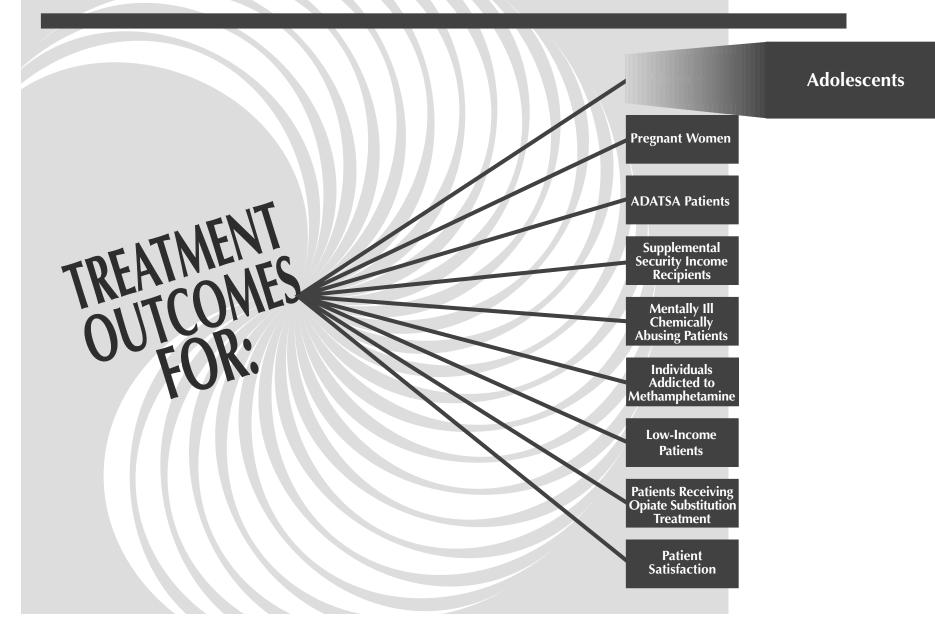
Current Research Efforts

Some of the results of the outcomes research conducted under the auspices of DASA on the benefits of prevention and treatment are displayed on the following pages. Below is a partial list of research projects currently underway:

- · Arrestee Drug Abuse Monitoring Project
- Evaluation of the Washington State Drug-Free Workplace Program
- · Statewide Household Survey to Assess Need for Treatment Among Adults in Washington State
- · Treatment Outcomes of Persons with Co-Occurring Mental Health and Substance Abuse Disorders
- Outcomes of Pregnant, Postpartum, and Parenting Women Who Receive Specialized Chemical Dependency Services
- · Treatment Outcomes of Parenting Women Who Participate in Specialized and Non-Specialized Long-Term Care
- Analysis of Use, Cost, and Outcomes of Opiate Substitution Treatment Services in Washington and Oregon
- · School Outcomes of Youth in Publicly Funded Treatment
- Cost Offsets of Treatment for Supplemental Security Income (SSI) Recipients
- Evaluation of the RUaD (Reduce Underage Drinking) Program

In addition, the Research and Evaluation Section is assisting in development of a web-based client outcome tracking system for use by providers, county coordinators, and state-level managers.

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Profile of Adolescents Served in Publicly Funded Chemical Dependency Programs in Washington State

A profile of adolescents (ages 12 through 17) admitted to publicly funded chemical dependency treatment in Washington State in SFY 2003 reveals the following characteristics at time of admission:

Number of Individuals Admitted:	5,433
Median Age:	15
Gender:	64% male; 36% female
School Attendance:	72% in school (at least part-time); 28% out of school
Primary Drug:	Marijuana - 63%; Alcohol -21%; Stimulants (including Methamphetamine) - 9%
Criminal Justice Involvement:	69% arrested at least once in previous year
Housing Status:	2% homeless*

A 1999 study of adolescents (age 20 and younger) admitted to publicly funded chemical dependency treatment revealed the following profile:

- Between 55-70% of youth admitted to residential treatment had run away from home at least once in their lives.
- Between 23-34% of youth had one or more emergency room visits in the year prior to admission.
- 90% of youth admitted to treatment began using their primary substance of abuse prior to age 16.
- Between 70-90% reported at time of admission that they currently smoke cigarettes.
- Between 23-37% of those admitted to residential treatment had been domestic violence victims.²

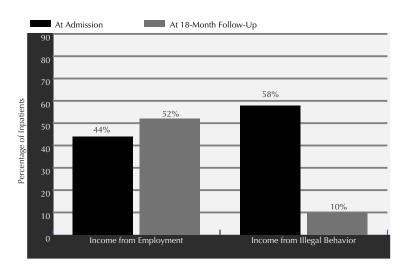
^{*}Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

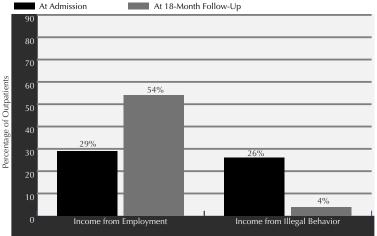
¹ Research and Evaluation Section, Washington State Division of Alcohol and Substance Abuse, July 2003. Data include unduplicated admissions to treatment; detoxification, transitional housing, private-pay, and Department of Corrections patients are excluded.

² Rodriguez, F., Profile of Youth Clients Admitted to Publicly Funded Substance Abuse Treatment Programs in Washington State, 1998. Olympia, Washington: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 1999.

After Treatment, More Adolescents Reported Income Earned from Employment, and Fewer Reported Income Earned from Illegal Behavior.





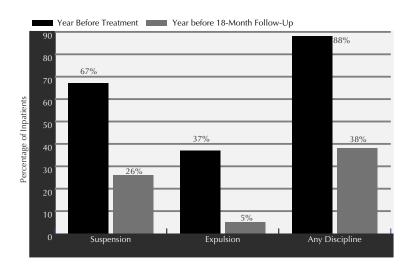


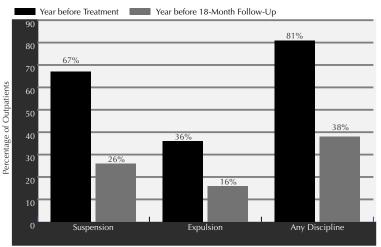
Source: New Standards, Inc. Washington State Division of Alcohol and Substance Abuse 18-Month Adolescent Outcomes Report. St. Paul, MN: New Standards, Inc., 1997.

At the time of admission, adolescent inpatients were more likely to report income from illegal behavior than from legitimate employment, while outpatients were almost equally as likely to report income from both sources. At the time of the 18-month follow-up, however, adolescents who had been in both inpatient and outpatient treatment were five times more likely to report income from employment rather than illegal behavior.



School Discipline Problems for Adolescent Patients Decreased After Treatment.



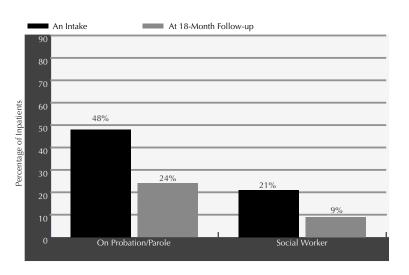


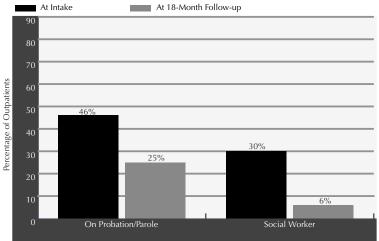
Source: New Standards, Inc. Washington State Division of Alcohol and Substance Abuse 18-Month Adolescent Outcomes Report. St. Paul, MN: New Standards, Inc., 1997.

Not surprisingly, adolescents with substance abuse problems tend to experience behavioral problems when attending school. After substance abuse treatment, however, the number of adolescents reporting any school discipline problems in the preceding year dropped by 50%. An especially encouraging outcome is the substantial reduction in school expulsions for youth receiving either inpatient or outpatient treatment. Additional study results also showed a corresponding improvement in school grades after treatment.

A Lower Percentage of Adolescent Patients were Under Legal Supervision 18 Months After Treatment.







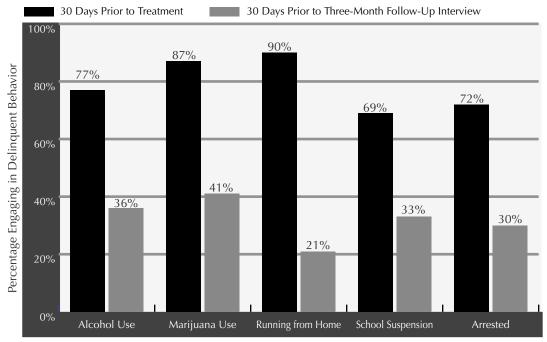
Source: New Standards, Inc. *Washington State Division of Alcohol and Substance Abuse 18-Month Adolescent Outcomes Report.* St. Paul, MN: New Standards, Inc., 1997.

A large proportion of children involved in the juvenile justice system have substance abuse problems and, similarly, a large portion of juveniles in chemical dependency treatment programs are involved in criminal activities. Therefore, it is expected that obtaining substance abuse treatment will have a positive effect on criminal behavior, as well as decreasing or ceasing substance use.

As expected, legal involvement by adolescents decreased considerably after treatment for both inpatients and outpatients. Compared to their status at intake, approximately half as many adolescents were on parole or probation at the time of follow-up. There was a similar reduction in supervision by social workers for inpatients, and only 6% of outpatients were under a social worker's supervision at the 18-month follow-up, compared to 30% at intake.



"Becca" Youth Who Complete Residential Chemical Dependency Treatment Are Much Less Likely to Use Alcohol or Marijuana, Less Likely to Run Away from Home, and Less Likely to Be Suspended from School or Arrested.



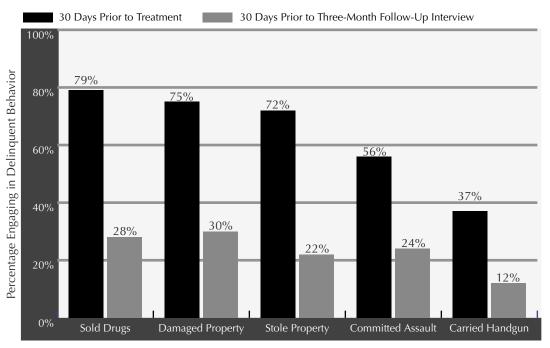
Source: Peterson, P., et al. *Treatment Outcome Evaluation: Youth Admitted to Residential Chemical Dependency Treatment Under the Provisions of the "Becca" Bill.* Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 1997.

The 1995 At-Risk/Runaway Youth Act created the "Becca" program, named after a youth who was murdered after she ran away from home. Becca youth are chemically dependent adolescents who are beyond their parent's control and/or are chronic runaways. These youth are estimated at approximately 3-4% (1,350 to 2,250) of the 45,000 youth ages 13-19 who are in need of substance abuse treatment. Most are ages 14 to 16.

While the needs of Becca Youth are very high, this graph indicates that residential chemical dependency treatment results in significant positive changes in behavior following treatment completion.

Rates of Delinquent Behavior Among "Becca" Youth Decline Substantially Following Completion of Residential Chemical Dependency Treatment.





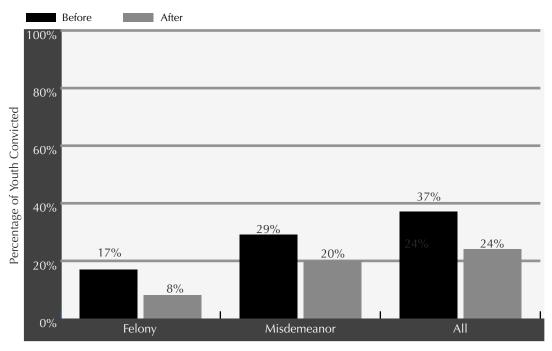
Source: Peterson, P., et al., *Treatment Outcome Evaluation: Youth Admitted to Residential Chemical Dependency Treatment Under the Provisions of the "Becca" Bill*. Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 1997.

This graph indicates that Becca youth who receive chemical dependency treatment are much less likely to engage in delinquent behavior following treatment completion. In this 1997 study conducted by the University of Washington, the percentage of Becca youth involved in selling drugs declined by 64.6%; those stealing property dropped by 60.4%; and the percentage of those who committed assault dropped by 57.1%.

The 1995 At-Risk/Runaway Youth Act created the "Becca" program, named after a youth who was murdered after she ran away from home. Becca youth are chemically dependent adolescents who are beyond their parent's control and/or are chronic runaways. These youth are estimated at approximately 3-4% (1,350 to 2,250) of the 45,000 youth ages 13-19 who are in need of substance abuse treatment. Most are ages 14 to 16.



There are Significant Declines in Criminal Convictions Among Youth Who Receive Chemical Dependency Treatment.

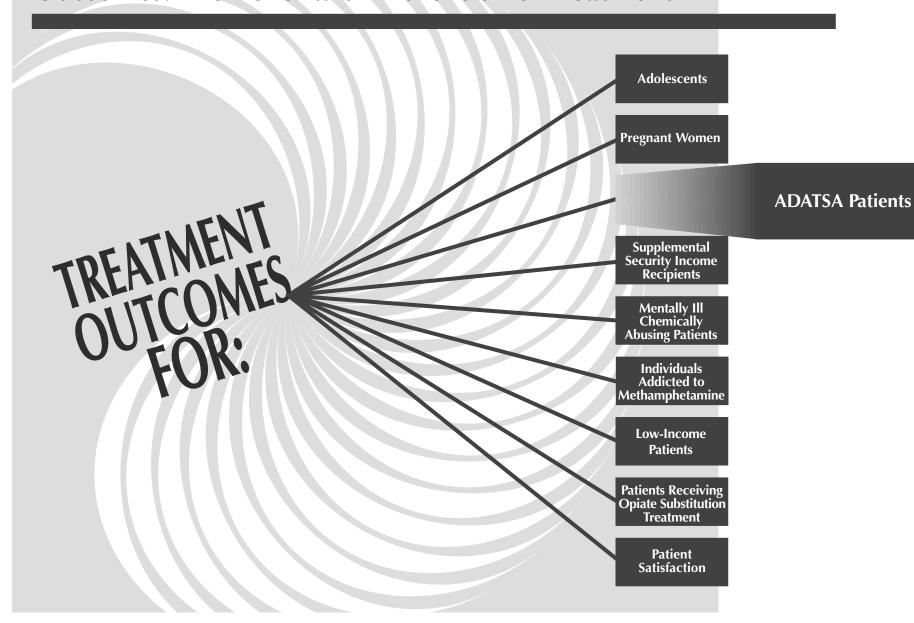


Source: Luchansky, B., et al., "Treatment Readmissions and Criminal Recidivism in Youth Following Participation in Chemical Dependency Treatment." Olympia, WA: Washington State Department of Social and Health Services, 2003.

A 2003 study of almost 6,000 Washington State youth ages 14-17 found significant declines in criminal convictions following chemical dependency treatment. The rate of all convictions fell from 37% in the 18 months prior to treatment to 24% in the 18 months following treatment, representing a 35% decline. Felony convictions declined by 56%; misdemeanors fell by 30%.

However, waiting lists for publicly funded chemical dependency treatment for youth remain very long. Average wait time for youth residential treatment in April 2004 was approximately 4-6 weeks.

Outcomes: The Benefits of Prevention & Treatment





Profile of Pregnant Women Served in Publicly Funded Chemical Dependency Treatment Programs in Washington State

A profile of pregnant women admitted to publicly funded chemical dependency treatment in Washington State in SFY 2003 reveals the following characteristics at time of admission:

Number of Individuals Admitted:	506
Median Age:	23
Employment Status:	Employed (full- or part-time) – 8%; Unemployed – 92%
Primary Drug:	Stimulants (including Methamphetamine) - 34%; Alcohol – 21%; Marijuana - 20%
Criminal Justice Involvement:	61% arrested at least once in previous year
% with Children in the Home:	40%
Housing Status:	10% homeless*

A 1999 study of pregnant, post-partum, and/or parenting women (PPWs) admitted to publicly funded chemical dependency treatment in Washington State indicated:

- More than 60% of PPWs admitted to treatment had been victims of domestic violence.
- Over 50% reported public assistance as their primary source of income.
- Between 38-73% had visited an emergency room one or more times in the year prior to treatment admission.
- Over one-quarter reported having received mental health treatment in the year prior to admission.
- Between 26-63% reported having used injection drugs.
- Between 77-92% reported they currently smoke cigarettes.³

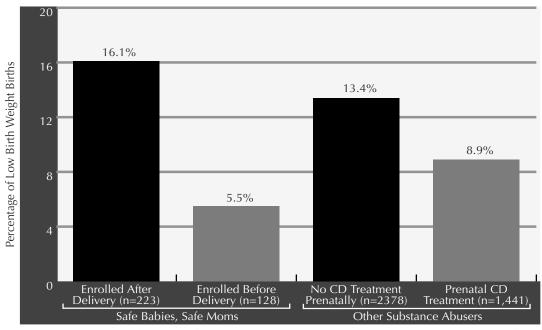
^{*} Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

¹ Research and Evaluation Section, Washington State Division of Alcohol and Substance Abuse, July 2003. Data include unduplicated admissions to treatment; detoxification, transitional housing, private-pay, and Department of Corrections patients are excluded.

² Rodriguez, F., Profile of Pregnant, Post-Partum, and/or Parenting Women (PPWs) Admitted to Publicly Funded Substance Abuse Treatment Programs in Washington State, 1998. Olympia, Washington: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 1999.

Substance-Abusing Women Who Received Chemical Dependency Treatment were Less Likely to Have a Low Birth Weight Baby.





Source: Cawthon, L., "Safe Babies, Safe Moms" (Fact Sheet Number 4.36f). Washington State Department of Social and Health Services, Research and Data Analysis, January 2004.

Low birth weight (LBW) – newborn infants weighing less than 5.5 pounds, or 2,500 grams—is the risk factor most closely associated with neonatal death, and is associated with a wide range of disorders, including neurodevelopmental conditions, mental retardation, vision and hearing impairments, and other developmental disabilities. Alcohol and other drug abuse is linked to LBW.¹

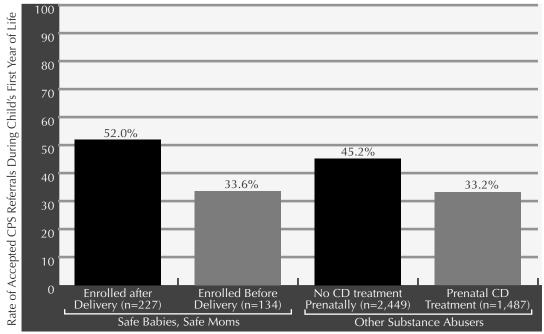
Substance-abusing pregnant mothers receiving comprehensive services, including chemical dependency treatment, prenatally, through the Safe Babies, Safe Moms program, were 66% less likely to give birth to an LBW baby, compared with substance-abusing women who enroll after delivery. Outside of the program, substance-abusing women who received chemical dependency treatment prenatally were 34% less likely to give birth to an LBW baby, compared with women who did not receive treatment.²

U.S. Department of Health and Human Services, Healthy People 2010 (Conference Edition), 16-4, 5, 34. Washington, DC: 2000.

² Cawthon, L., "Safe Babies, Safe Moms" (Fact Sheet Number 4.36f). Olympia, WA: Washington State Department of Social and Health Services, Research and Data Analysis, January 2004.



Substance-Abusing Women Who Received Chemical Dependency Treatment Prenatally were Less Likely to Be Referred Later to Child Protective Services.



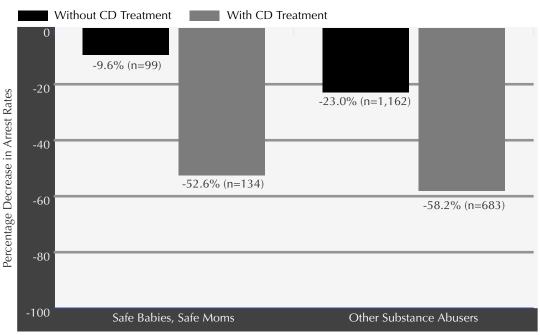
Source: Cawthon, L., "Safe Babies, Safe Moms" (Fact Sheet Number 4.36f). Washington State Department of Social and Health Services, Research and Data Analysis, January 2004.

Child abuse and neglect is one of the most important consequences of maternal substance abuse. The rate of accepted referrals to Child Protective Services (CPS) during a child's first year of life is ten times higher (45.2%) when their substance-abusing mothers did not receive chemical dependency treatment than for infants on Medicaid whose mothers are not substance abusers (4.5%).

Substance-abusing pregnant mothers receiving comprehensive services, including chemical dependency treatment prenatally, through the Safe Babies, Safe Moms program, were 35.4% less likely to be referred to CPS during the first year of their child's life than those enrolling after their child was born. Outside of the program, substance-abusing women who received chemical dependency treatment prenatally were 26.5% less likely to be referred to CPS during the first year of their child's life than substance-abusing women who did not receive treatment.¹

Substance-Abusing Pregnant Women Who Received Chemical Dependency Treatment were Less Likely to Be Arrested.





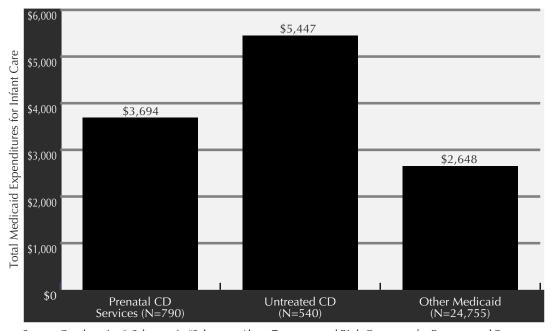
Source: Cawthon, L., "Safe Babies, Safe Moms" (Fact Sheet Number 4.36f). Washington State Department of Social and Health Services, Research and Data Analysis, January 2004.

Criminal justice involvement is a significant issue for many pregnant, substance-abusing women. In addition to the burden of drug- and alcohol-related crime on society, crime presents serious health and developmental risks to children, both prenatally and after they are born.

Among women enrolled in the Safe Babies, Safe Moms program, those who received chemical dependency treatment had more than a five times greater reduction in arrest rates in the following two years compared with those who did not receive treatment. Outside of the program, among substance-abusing pregnant women, those who received chemical dependency treatment had more than double the reduction in arrest rates in the following two years after delivery compared with those who did not receive treatment.¹



Average Medicaid Costs During the First Two Years of Life were Lower for Infants Born to Women Who Received Chemical Dependency Treatment in the Prenatal Period than for Those Born to Substance-Abusing Women Who Did Not Receive Treatment.

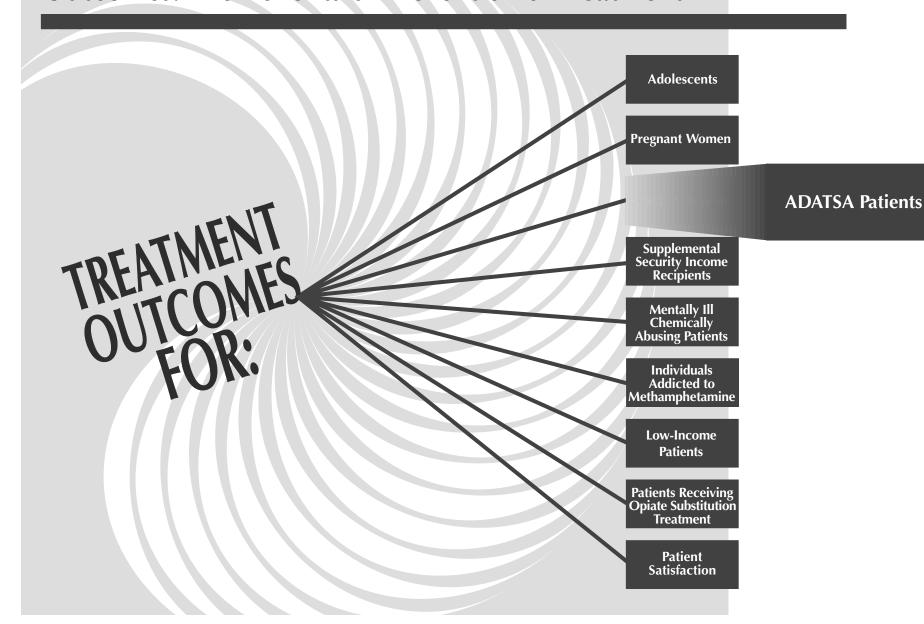


Source: Cawthon, L., & Schrager, L. "Substance Abuse Treatment and Birth Outcomes for Pregnant and Postpartum Women in Washington State." *First Steps Database* 5(1). Washington State Department of Social and Health Services, 1995.

Low birth weight (LBW – newborn infants weighing less than 5.5 pounds, or 2,500 grams) is the single most important factor in determining infant medical care expenditures during the neonatal period. Alcohol and other drug use is associated with LBW.¹

This graph indicates that average Medicaid expenditures for care during the first two years of life for infants born to untreated substance abusers was 47.5% higher than for substance-abusing women who received chemical dependency treatment during pregnancy, and more than twice that for infants born to non-substance abusing women receiving Medicaid.

Outcomes: The Benefits of Prevention & Treatment





Profile of ADATSA Patients Receiving Publicly Funded Chemical Dependency Treatment in Washington State

A profile of patients admitted to publicly funded chemical dependency treatment under the Alcohol and Drug Addiction Treatment and Support Act (ADATSA) in Washington State in SFY 2003 reveals the following characteristics at time of admission:¹

Number of Individuals Admitted:	7,219
Median Age:	35
Gender:	66% Male; 34% Female
Employment Status:	Employed (full- or part-time or temporary) – 4%; Unemployed – 96%
Primary Drug:	Alcohol – 44%; Stimulants (including Methamphetamine) – 23%; Marijuana - 11%; Cocaine/Crack – 12%
Criminal Justice Involvement:	69% arrested at least once in previous year
% with Children in the Home:	20%
Housing Status:	23% homeless*

Enacted in 1987, the ADATSA legislation created a program to treat adults addicted to alcohol or other drugs. To qualify, clients must be indigent, unemployable, and incapacitated due to their addiction. Patients may be admitted to either residential or outpatient modalities of treatment as individually required. The immediate goal of the program is abstinence, while ancillary goals include improved personal coping skills, as well as social and vocational skills. Success in moving toward these goals is expected to result moving toward the long-term objective of self-sufficiency.

The average ADATSA patient has had a 15-year history of substance abuse, starting at age 16, with one or more prior treatment episodes. Approximately two-thirds are white, and one-third ethnic minorities. A significant proportion of patients suffer from physical, mental, or emotional problems in addition to their addiction.²

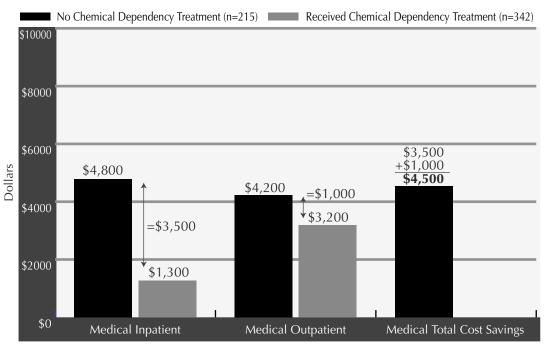
^{*}Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

Data include unduplicated admissions to treatment; detoxification, transitional housing, private-pay, and Department of Corrections patients are excluded.

² Van Der Hyde, V., et al., ADATSA Follow-Up Study of Extended Outpatient Care: A Comparison of 90 Days Versus 180 Days of Outpatient Treatment for Clients of Washington State's Alcoholism and Drug Addiction Treatment and Support Act. Olympia, WA: Washington State Department of Social and Health Services, Office of Research and Data Analysis, 1995.

Average Medical Costs for ADATSA Patients Who Received Chemical Dependency Treatment were \$4,500 Lower than Those for Untreated Patients Over a Five-Year Follow-Up Period.



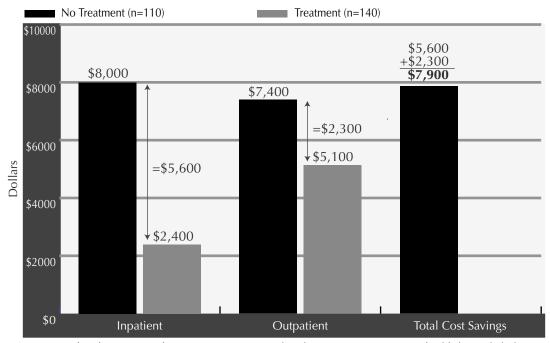


Source: Luchansky, B., & Longhi, D. Cost Savings in Medicaid Expenses: An Outcome of Publicly Funded Chemical Dependency Treatment in Washington State: A Five-Year Cost Savings Study of Indigent Persons Served by Washington State's Alcoholism and Drug Addiction Treatment and Support Act (ADATSA). Olympia, WA: Washington State Department of Social and Health Services, Research and Data Analysis, 1997.

This graph indicates that chemical dependency treatment can result in lower medical expenses. Over a five-year period, treated ADATSA patients had medical costs averaging \$4,500 less than those who did not receive treatment. Inpatient hospital expenses averaged \$3,500 less, while outpatient medical expenses averaged \$1,000 less.



For ADATSA Patients with Medicaid Medical Expenses Prior to Admission, Chemical Dependency Treatment was Associated with \$7,900 in Overall Savings in Medical Expenses Over a Five-Year Follow-Up Period.



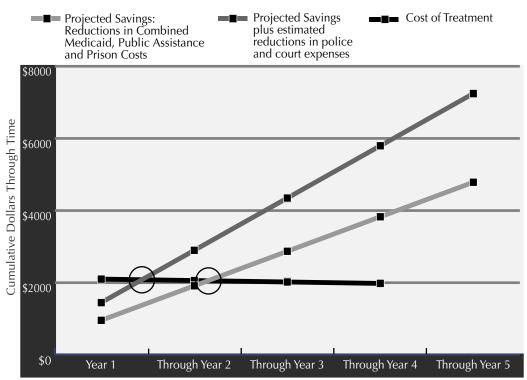
Source: Luchansky, B., & Longhi, D. Cost Savings in Medicaid Expenses: An Outcome of Publicly Funded Chemical Dependency Treatment in Washington State: A Five-Year Cost Savings Study of Indigent Persons Served by Washington State's Alcoholism and Drug Addiction Treatment and Support Act (ADATSA). Olympia, WA: Washington State Department of Social and Health Services, Research and Data Analysis, 1997.

This graph indicates striking savings in medical expenses for ADATSA patients, with Medicaid medical expenses prior to admission, in the five years following chemical dependency treatment. Overall savings totaled \$7,900 — \$2,300 in hospital inpatient, and \$5,600 in medical outpatient expenses. Chemical dependency treatment is a wise investment, both in the health of ADATSA patients, and in reducing overall health expenses.

¹ Luchansky, B., & Longhi, D., Cost Savings in Medicaid Expenses: An Outcome of Publicly Funded Chemical Dependency Treatment in Washington State: A Five-Year Cost Savings Study of Indigent Persons Served by Washington State's Alcoholism and Drug Addiction Treatment and Support Act (ADATSA). Olympia, WA: Washington State Department of Social and Health Service, Research and Data, Analysis, 1997.

Chemical Dependency Treatment Provided to ADATSA Patients Results in Reduced Costs to the Public Over a Five-Year Follow-Up Period.

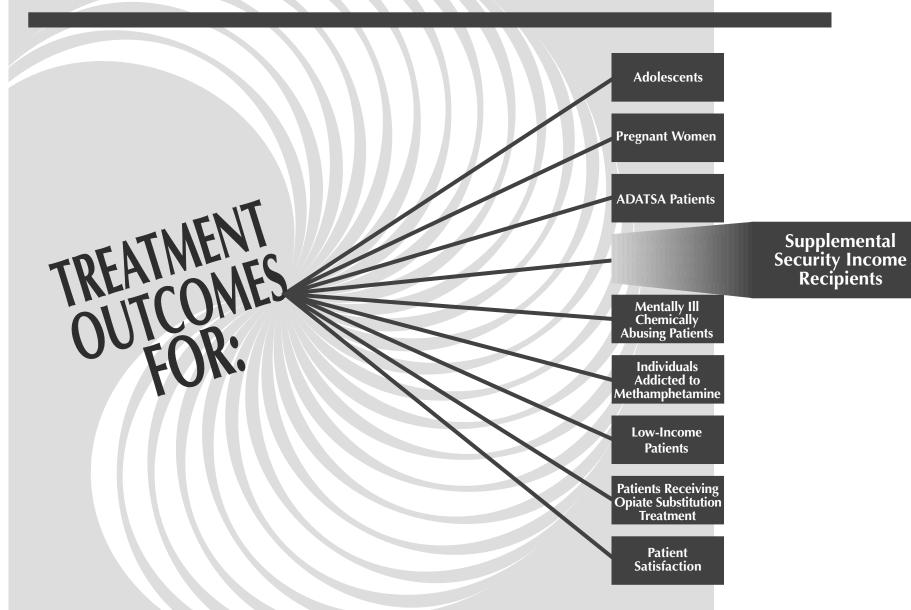




Source: Luchansky, B., & Longhi, D. Cost Savings in Medicaid Expenses: An Outcome of Publicly Funded Chemical Dependency Treatment in Washington State: A Five-Year Cost Savings Study of Indigent Persons Served by Washington State's Alcoholism and Drug Addiction Treatment and Support Act (ADATSA). Olympia, WA: Washington State Department of Social and Health Services, Research and Data Analysis, 1997.

This five-year comparison of projected incremental savings with projected treatment costs for ADATSA (Alcoholism and Drug Addiction Treatment and Support Act) patients shows that the overall incremental savings are \$7,200, while the cumulative treatment costs total \$1,940. This means that every additional dollar spent on the treatment group results in \$3.71 in savings by the end of the five-year period. When estimated reductions in police and court expenses are added to the projections, the break-even point between costs and savings occurs much sooner. Additional funds spent on treatment pay for themselves in just over one year.

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Profile of Supplemental Security Income (SSI) Recipients Receiving Publicly Funded Chemical Dependency Treatment in Washington State

Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify for benefits under Social Security. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.

A profile of SSI recipients admitted to publicly funded chemical dependency treatment in Washington State in SFY 2003 reveals the following characteristics at time of admission:

Number of Individuals Admitted:	1,873
Median Age:	47
Gender:	58% Male; 43% Female
Employment Status:	Employed (full- or part-time or temporary) – 3%; Unemployed – 96%
Primary Drug:	Alcohol – 50; Heroin – 6%; Marijuana – 12%
Criminal Justice Involvement:	34% arrested at least once in previous year
% with Children in the Home:	22%
Housing Status:	11% homeless*

^{*} Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

Chemical Dependency Treatment Lowers Medical Costs and is Associated with Better Criminal Justice Outcomes Among Supplemental Security Income (SSI) Recipients.*



The Department of Social and Health Services' Research and Data Analysis Division examined medical and chemical dependency treatment records for nearly 129,000 adult Supplemental Security Income (SSI) recipients to determine need for and receipt of chemical dependency treatment services. Some 16% were found to be in need of treatment, and, of these, 50% received chemical dependency treatment between July 1997 and December 2001.

Medical, mental health, and nursing home cost differences between those who received treatment and those who did not were measured. After adjusting for age, race, sex, and prior medical expenses, and also subtracting costs of chemical dependency treatment (including detoxification), average monthly costs were \$252 higher per month for individuals who did not receive treatment than for those who received at least some treatment. The differential was even greater for those completing chemical dependency treatment.

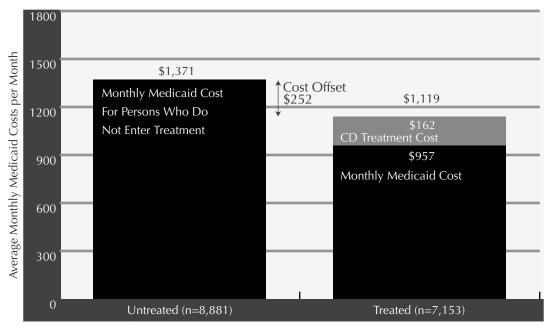
If an additional 30% of the 10,572 SSI recipients in need of chemical dependency treatment were to receive it, annual medical cost savings would amount to approximately \$9.6 million.

In addition, chemical dependency treatment for SSI recipients was associated with better criminal justice outcomes: for those who completed treatment, a 43% reduced likelihood of arrest; a 38% reduced likelihood of any conviction; and a 48% reduced likelihood of a felony conviction.

*Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify for benefits under Social Security. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.



Chemical Dependency Treatment is Associated with Significantly Lower Medical Costs Among Supplemental Security Income (SSI) Recipients.



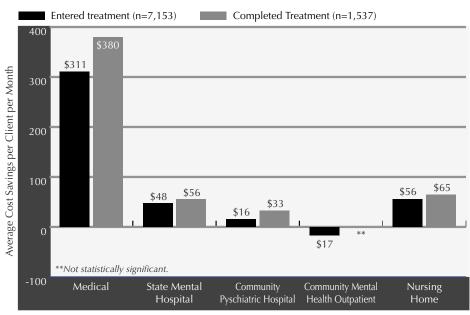
Source: Estee, S. & Nordlund, D., Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project: 2002 Progress Report. Washington State Department of Social and Health Services, Research and Data Analysis Division. 2003.

Medical and chemical dependency treatment records for nearly 129,000 adult Supplemental Security Income (SSI) recipients were examined to determine the need for, and receipt of, chemical dependency treatment services. Of these recipients, 16% were in need of treatment, and 50% of those in need received treatment between July 1997 and December 2001.

Medicaid costs differences – including medical, mental health, and nursing home costs – between those who received chemical dependency treatment and those who did not were measured. After adjusting for age, race, sex, and prior medical costs, the average monthly medical costs were \$414 per month higher for those who did not receive treatment. Even after including the cost of chemical dependency treatment, there was a net cost offset of \$252 per month or \$3,024 a year. The net cost offset rose to \$363 per month per client for those who completed treatment.

Chemical Dependency Treatment is Associated with Significantly Lower Medical Costs Among Supplemental Security Income (SSI) Recipients.*





Source: Estee, S. & Nordlund, D., Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project: 2002 Progress Report. Washington State Department of Social and Health Services, Research and Data Analysis Division, 2003.

Medical and chemical dependency treatment records for nearly 129,000 adult Supplemental Security Income (SSI) recipients were examined to determine the need for, and receipt of, chemical dependency treatment services. Of these recipients, 16% were in need of treatment, and 50% of those in need received treatment between July 1997 and December 2001.

Medicaid costs differences – including medical, mental health, and nursing home costs – between those who received chemical dependency treatment and those who did not were measured. After adjusting for age, race, sex, and prior medical costs, there were found to be significant savings in medical, mental health, and nursing home costs. Overall reductions were \$414 per month per client for those who entered chemical dependency treatment compared with those in need of treatment but who did not receive it, and even higher (\$530 per month) for those who completed treatment.

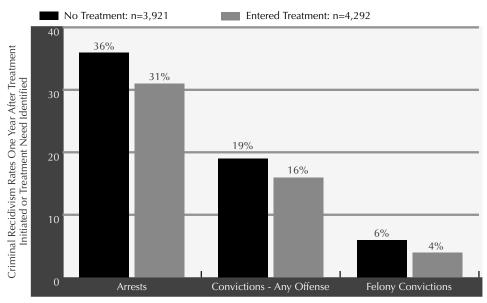
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^{*}Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify for benefits under Social Security. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.



Chemical Dependency Treatment is Associated with Fewer Criminal Arrests and Convictions Among Supplemental Security Income (SSI) Recipients.*

Criminal Recidivism Rates One Year After Treatment Initiated or Treatment Need Identified



Source: Estee, S. and Nordlund, D., Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project – 2002 Progress Report. Washington Department of Social and Health Services, Research and Data Analysis Division, February 2003.

The Department of Social and Health Services' Research and Data Analysis Division examined criminal arrest and conviction and chemical dependency treatment records for nearly 129,000 adult Social Security Income (SSI) recipients. Some 8,743 SSI recipients were found to have an arrest or conviction in the two years prior to initiating chemical dependency treatment or having a need for such treatment indicated. In the following year, those who entered treatment were found to be 16% less likely to have been arrested, and 34% less likely to have a felony conviction compared to those who did not enter treatment. Similarly, among clients who entered chemical dependency treatment and had a recent record of arrest or conviction, those who completed chemical dependency treatment were 43% less likely to be arrested, and 48% less likely to be convicted of a felony.

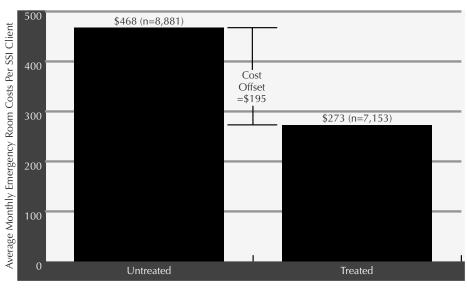
^{*}Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify for benefits under Social Security. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.

¹ Estee, S. and Nordlund, D., Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project – 2002 Progress Report. Olympia, WA: Department of Social and Health Services, Research and Data Analysis Division, February 2003.

² Percentages are based on multivariate proportional hazards models that take account of age, gender, and race/ethnicity. See Ibid., pp. 31-35 for details.

Savings in Emergency Room Costs Associated with Chemical Dependency Treatment Provided to Supplemental Security Income (SSI) Recipients More Than Offsets the Cost of Treatment.*



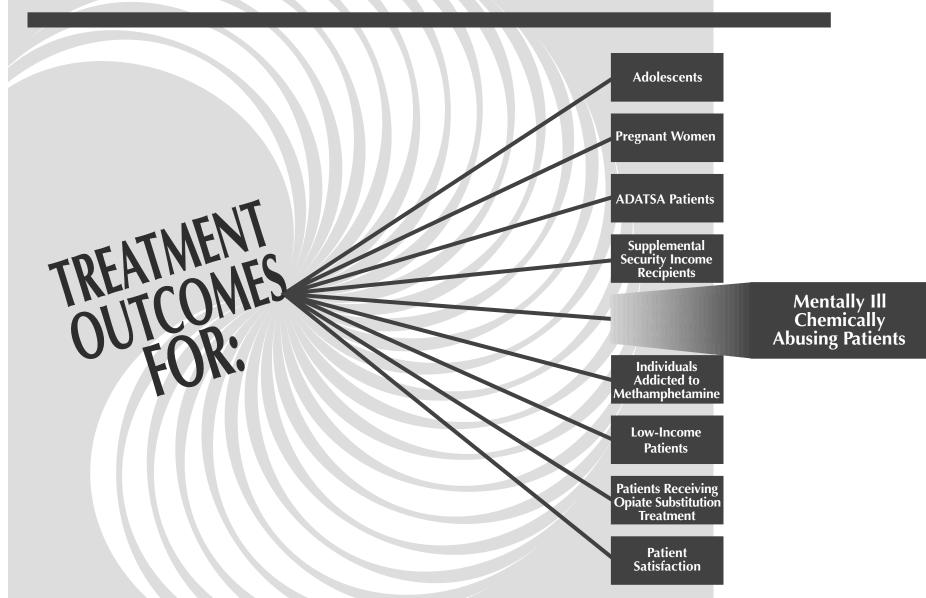


Source: Nordlund, D., et al. "Chemical Dependency Treatment Reduces Emergency Room Costs and Visits: Washington State Supplemental Security Recipients." Olympia, WA: Washington State Department of Social and Health Services, Research and Data Analysis Division, May 2004.

In a study of almost 124,000 Supplement Security Income (SSI) recipients between July 1997 and December 2001, it was found that average monthly emergency room costs for those who were in need of chemical dependency treatment and received it were \$195 lower than for those who needed treatment but did not receive it. The number of visits per year was 14% lower, and average cost per visit was 38% lower. The saving in emergency room costs alone more than offset the average monthly cost of chemical dependency treatment (\$162).

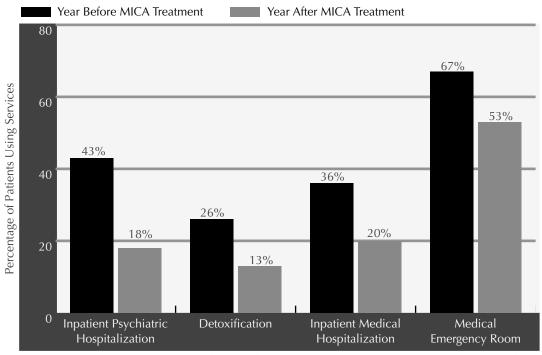
^{*}Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify for benefits under Social Security. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.

Outcomes: The Benefits of Prevention & Treatment





Mentally Ill Chemically Abusing Patients Utilize Fewer Medicaid Services Following Discharge from Residential Treatment.

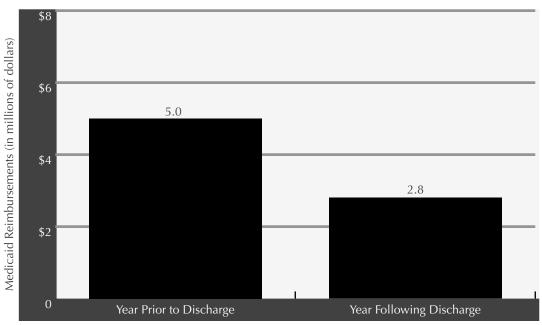


Source: Maynard, C., et al. "Utilization of Services for Mentally III Chemically Abusing Patients Discharged from Residential Treatment," *The Journal of Behavioral Health Services & Research* 26(2), May 1999.

A significant number of Medicaid patients are diagnosed with both mental illness and substance abuse disorders. Treating these "co-occurring" disorders in an integrated manner has proven effective in enhancing health-related outcomes. This graph indicates that Medicaid expenses for patients with co-occurring disorders receiving coordinated services in a residential setting decreased overall by 44% in the year following discharge from the year prior to discharge.

Use of Expensive Acute Care Services Decreased for Mentally III Chemical Abusing Patients Following Discharge from Integrated Residential Treatment.

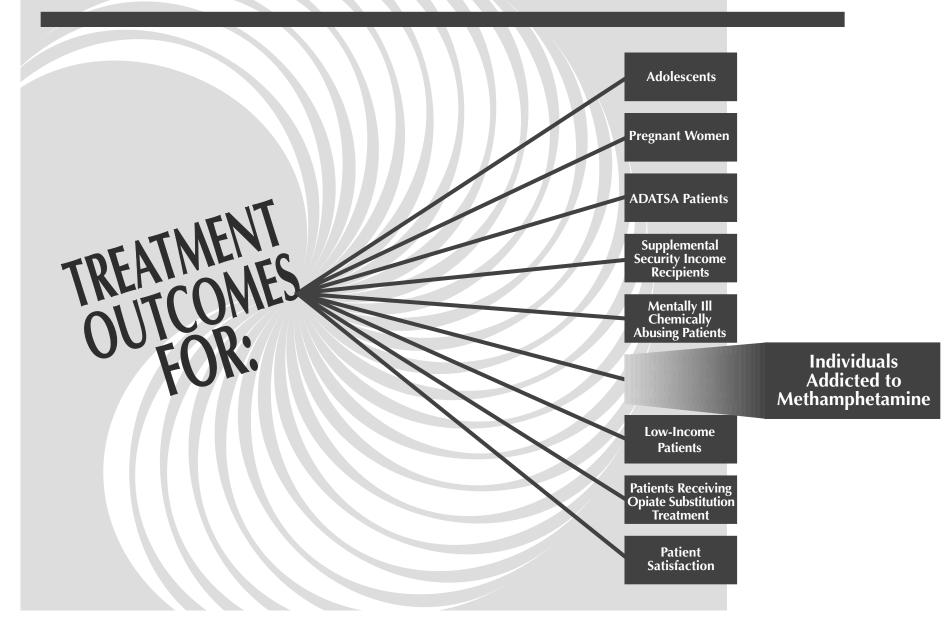




Source: Maynard, C., et al. "Utilization of Services for Mentally III Chemically Abusing Patients Discharged from Residential Treatment," *The Journal of Behavioral Health Services & Research* 26(2), May 1999.

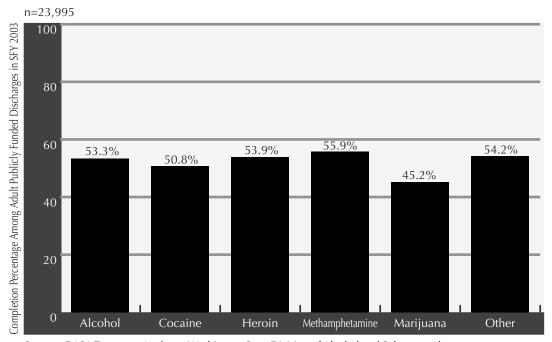
Integrated mental illness/chemical dependency treatment has proven effective in reducing use of acute care services for mentally ill chemical abusing ("co-occurring") patients following discharge. The percentage of patients requiring inpatient psychiatric hospitalization fell by 58%; detoxification by 50%; inpatient medical hospitalization by 44%; and use of emergency rooms by 21% in the year following discharge.

Outcomes: The Benefits of Prevention & Treatment





Adult Patients Addicted to Methamphetamine Complete Publicly Funded Chemical Dependency Treatment at Rates Similar to Patients Addicted to Other Substances.



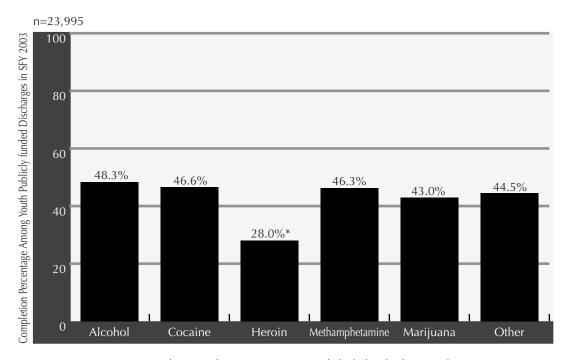
Source: DASA Treatment Analyzer, Washington State Division of Alcohol and Substance Abuse

This graph indicates that adults receiving publicly funded treatment for methamphetamine addiction complete treatment at rates similar to (actually slighter higher than) adults addicted to other drugs. This holds true across treatment modalities – intensive inpatient, intensive outpatient, outpatient, recovery house, and long-term residential treatment.

It should be noted that the majority of individuals addicted to methamphetamine are polydrug users.

Youth Patients Addicted to Methamphetamine Complete Publicly Funded Chemical Dependency Treatment at Rates Similar to Patients Addicted to Other Substances.





Source: DASA Treatment Analyzer, Washington State Division of Alcohol and Substance Abuse

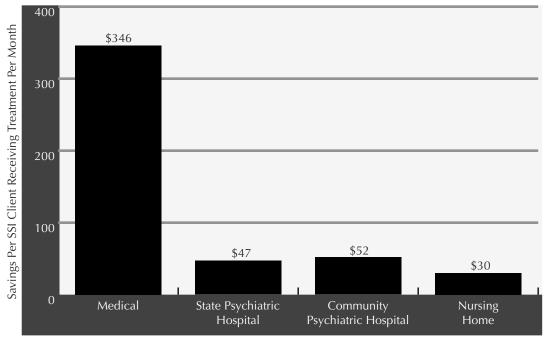
*n = 7, not large enough for percentage to reach statistical significance.

This graph indicates that youth ages 12-17 receiving publicly funded treatment for methamphetamine addiction complete treatment at rates similar to youth addicted to other drugs. This holds true across treatment modalities – intensive inpatient, intensive outpatient, outpatient, recovery house, and long-term residential treatment.

It should be noted that the majority of youth addicted to methamphetamine are polydrug users.



Treatment of Stimulant Addiction, Including Methamphetamine Addiction, Results in Substantial Savings in Health Care Costs Among Supplemental Security Income Recipients.



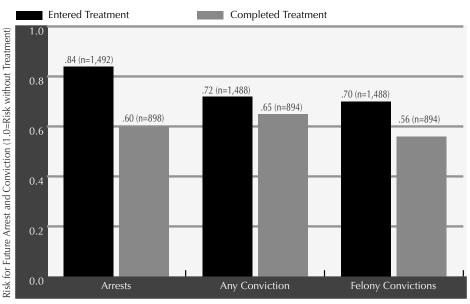
Source: Estee, S. & Nordlund, D. Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project: 2002 Progress Report. Washington State Department of Social and Health Services, Research and Data Analysis Division, 2003.

This graph indicates that there are substantial savings in health care costs for Washington State Supplemental Security Income (SSI) recipients who receive chemical dependency treatment for stimulant addiction (including methamphetamine addiction) compared with those who need such treatment but do not receive it. Even factoring in the cost of chemical dependency treatment (\$178 per month), the net savings in health care costs are \$296 per month or \$3,552 per year.

Providing treatment for stimulant (methamphetamine) addiction for SSI recipients in fact results in higher net cost savings (\$296/month) than treatment for addiction to other substances (\$267/month).

Treatment of Stimulant Addiction, Including Methamphetamine Addiction, Results in Reduced Risk for Arrest and Conviction Among Supplemental Security Income Recipients.*



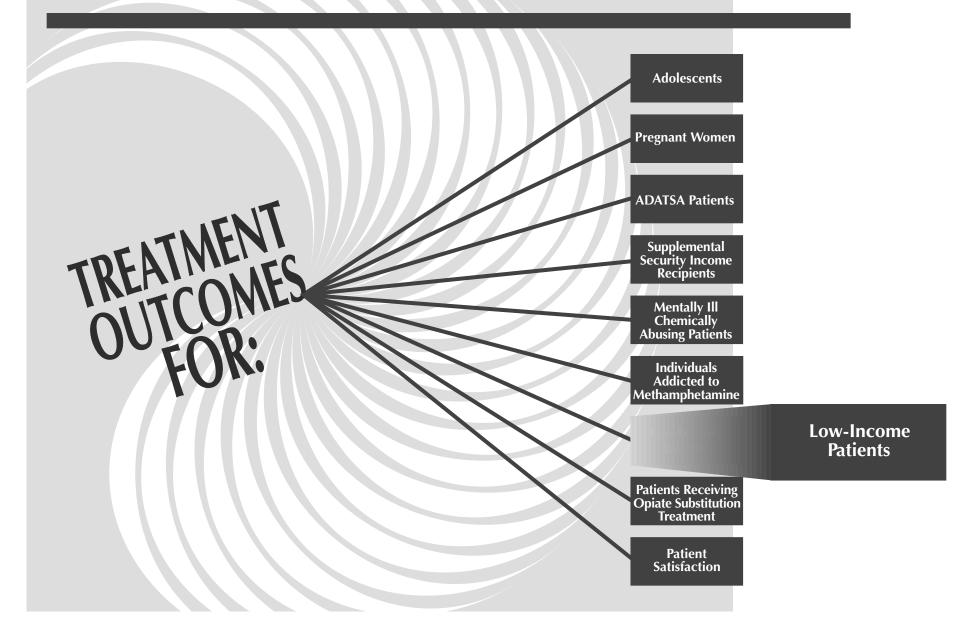


Source: Estee, S. & Nordlund, D. Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project: 2002 Progress Report. Washington State Department of Social and Health Services, Research and Data Analysis Division, 2003.

This graph indicates that there are substantially reduced risks for arrest and conviction Washington State Supplemental Security Income (SSI) recipients who receive chemical dependency treatment for stimulant addiction (including methamphetamine addiction) compared with those who need such treatment but do not receive it. The risk of arrest is 16% for those who enter treatment, and 40% lower for those who complete treatment. The risk of felony conviction is 30% lower for those who enter treatment, and 44% lower for those who complete treatment. Chemical dependency treatment for those addicted to methamphetamine is thus a good investment in safer communities and lower criminal justice costs.

^{*} Risks reflect results of proportional hazard models in which the effects of covariates on re-arrest or conviction rates (e.g., age, gender, race/ethnicity) are controlled.

Outcomes: The Benefits of Prevention & Treatment





Profile of Low-Income Adults Receiving Publicly Funded Chemical Dependency Treatment in Washington State

A profile of low-income adults admitted to publicly funded chemical dependency treatment in Washington State in SFY 2003 reveals the following characteristics at time of admission:¹

Number of Individuals Admitted:	20,225
Median Age:	34
Gender:	61% Male; 39% Female
Employment Status:	Employed (full- or part-time) – 19%; Unemployed – 81%
Primary Drug:	Alcohol – 50%; Stimulants (including Methamphetamine) - 18%; Marijuana - 13%
Criminal Justice Involvement:	72% arrested at least once in previous year
% with Children in the Home:	37%
Housing Status:	14% homeless*

^{*} Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

Publicly Funded Residential Chemical Dependency Treatment Results in Improved Outcomes in Employment and Medical Status, Lower Substance Use and Higher Rates of Abstinence, and Reduced Criminal Activity.



A 1999 study was undertaken by the University of Washington's Alcohol and Drug Abuse Institute to assess the quality and effectiveness of the Division of Alcohol and Substance Abuse's publicly funded adult residential chemical dependency treatment system. Some 577 low-income patients were assessed at admission to treatment, and six months following their discharge. The study found:

- Patients were much less likely to use alcohol and illegal drugs following treatment. Self-reported abstinence rates for alcohol use in the past 30 days increased by 87%, and by 109% for drug use. Of those who continued to report any drug use, the percentage of patients who used any illegal drugs for seven or more of the past 30 days declined 74%, from 50% at treatment admission to 13% at follow-up.
- The average number of self-reported days of illegal activity declined 85%. Average 30-day earnings from illegal activity declined 93%, from \$485 at admission to \$32 at follow-up.
- In the 30 days prior to admission to treatment, only 19.8% of patients worked ten or more days. In the 30 days prior to the six-month post-discharge follow-up, 40.7% worked ten or more days, representing a 94% increase. Average monthly income increased from \$159 at admission to \$568 at follow-up.
- The percentage of patients reporting no days of medical problems during the past 30 days increased by 25% at the post-discharge follow-up. The number of days with mental health distress was reduced by 48%.
- The number of days with significant family conflict during the past 30 days declined by 62% at the post-discharge follow-up.¹



Profile of Adults Receiving Temporary Assistance for Needy Families Served By Publicly Funded Chemical Dependency Treatment Programs in Washington State

A profile of patients receiving Temporary Assistance for Needy Families (TANF) admitted to publicly funded chemical dependency treatment in Washington State in SFY 2003 reveals the following characteristics at time of admission:

Number of Individuals Admitted:	3,288
Median Age:	30
Gender:	26% Male; 74% Female
Employment Status:	Employed (full- or part-time) – 10%; Unemployed – 90%
Primary Drug:	Alcohol – 36%; Stimulants (including Methamphetamine) - 24%; Marijuana 21%
Criminal Justice Involvement:	54% arrested at least once in previous year
% with Children in the Home:	80%
Housing Status:	6% homeless*

A study of adults receiving TANF admitted to publicly funded chemical dependency treatment in Washington State, July 1998 – June 1999, indicated:

- One out of three women did not have a high school diploma or GED.
- Three out of four women reported they had been victims of domestic violence at some point in their lives.
- 21% reported receiving mental health treatment in the previous year.
- One out of three women reported using injection drugs at some point in the lives.²

Research has shown that timely access to quality chemical dependency treatment can play a major role in moving individuals off public assistance and toward healthy lifestyles and self-sufficient lives.

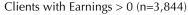
^{*} Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

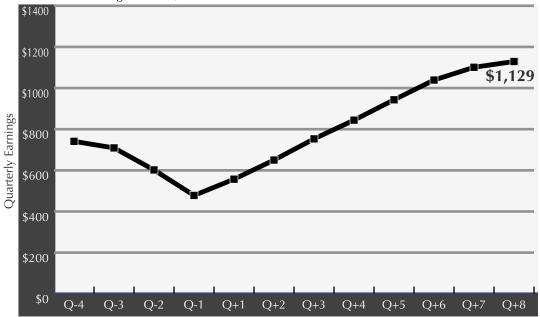
¹ Research and Evaluation Section, Washington State Division of Alcohol and Substance Abuse, July 2003. Data include unduplicated admissions to treatment; detoxification, transitional housing, private-pay, and Department of Corrections patients are excluded.

² Rodriguez, F. Key Characteristics of TANF Adults Admitted to Publicly Funded Treatment in Washington State, July 1998 – June 1999. Olympia, WA: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2000.

AFDC Clients Who are Employed Show Major Increases in Earnings Following Chemical Dependency Treatment.







Source: Wickizer, T., et al. "Employment Outcomes Among AFDC Recipients Treated for Substance Abuse in Washington State," *The Millbank Quarterly* 78(4), 2000.

This graph indicates that chemically dependent clients receiving AFDC ("Aid to Families with Dependent Children") support showed marked declines in employment income in the year prior to receiving chemical dependency treatment, and more than doubled their average employment income in the two years following treatment. AFDC in Washington State has now been replaced by TANF ("Temporary Assistance for Needy Families"). This 2000 study confirms the results of earlier studies indicating that chemical dependency treatment assists low-income patients in moving toward self-sufficiency.

Outcomes: The Benefits of Prevention & Treatment



Patients Receiving Opiate Substitution Treatment

Satisfaction



Profile of Patients Receiving Publicly Funded Opiate Substitution Treatment in Washington State

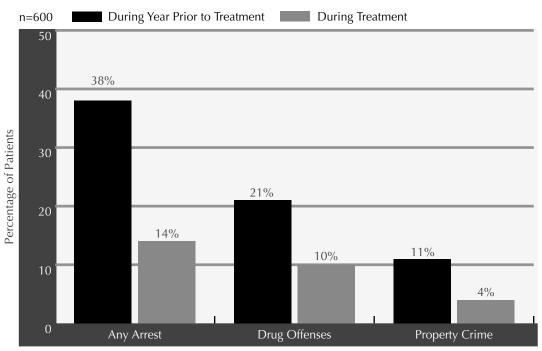
A profile of patients admitted to publicly funded opiate substitution treatment in Washington State in SFY 2003 reveals the following characteristics at time of admission:

Number of Individuals Admitted:	800
Median Age:	41
Gender:	46% Male; 54% Female
Employment Status:	Employed (full- or part-time or temporary) – 10%; Unemployed – 87%
Primary Drug:	Heroin – 91%; Other – 9%
Criminal Justice Involvement:	33% arrested at least once in previous year
% with Children in the Home:	26%
Housing Status:	14% homeless*

^{*}Includes homeless shelter/mission, on the street, transient quarters, no stable arrangement categories.

Criminal Arrests Among Publicly Funded Opiate Substitution Patients Decreased During Treatment When Compared to the Year Prior to Treatment.





Source: Baxter, B., and Albert, D., Report to the Legislature: Determining the Value of Opiate Substitution Treatment, 2002.

This graph indicates that patients receiving publicly funded opiate substitution treatment are less likely to be arrested for a crime during treatment than in the year prior to treatment.

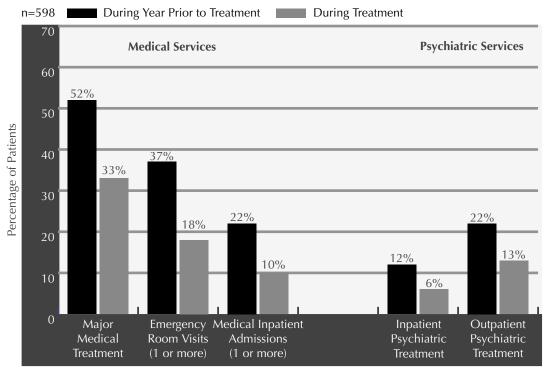
It is estimated that in 2000, almost 31,000 Washington State adults were in need of treatment for heroin addiction.¹ Sixteen opiate substitution clinics currently provide treatment through administration of methadone and delivery of counseling services. In addition, patients receive education, random urine drug screening to monitor drug use, and are subject to stringent rules regarding compliance. In SFY 2003, 4,923 patients were enrolled in opiate substitution programs in Washington State, 2,664 (54.1%) of whom were publicly funded.²

Albert, D., Determining the Value of Opiate Substitution Treatment. Olympia, WA: Washington State Department of Social and Health Services, Division of Alchol and Substance Abuse, January 2004.

² Data do not include patients enrolled in Veterans Administration programs.



Health Care Utilization Among Publicly Funded Opiate Substitution Patients Decreased During Treatment When Compared to the Year Prior to Treatment.



Source: Baxter, B., and Albert, D., Report to the Legislature: Determining the Value of Opiate Substitution Treatment - 2002.

Opiate substitution treatment has been scientifically shown to work. The federal Office of National Drug Control Policy called methadone therapy, "one of the longest-established, most thoroughly evaluated forms of drug treatment." A Consensus Panel convened by the National Institutes of Health in 1997 concluded, "Methadone treatment significantly lowers illicit opiate drug use, reduces illness and death from drug use, reduces crime, and enhances social productivity."

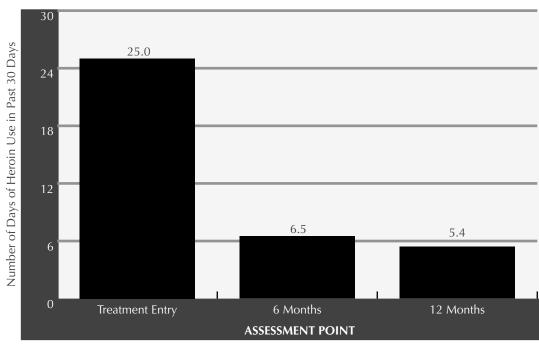
This graph indicates that patients receiving publicly funded opiate substitution treatment use fewer health care and psychiatric services during treatment than in the year prior to treatment. This results in significant cost savings throughout the health care system.

Office of National Drug Control Policy, The National Drug Control Strategy: 2000 Annual Report. Washington, DC: Office of the White House, 2000.

² National Institutes of Health, Effective Medical Treatment of Heroin Addiction: NIH Consensus Statement 1997. November 17-19, 1997 15(6).

Patients Receiving Opiate Substitution Treatment Show Significant Decreases in Heroin Use.



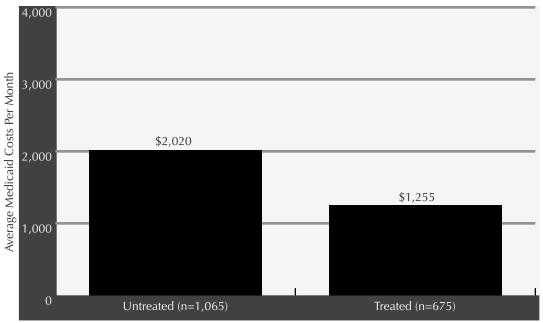


Source: Carney, M., et al., Washington State Outcomes Project: Opiate Study Sample. Final Report. Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 2003.

A 2003 study of 135 patients admitted to publicly funded opiate substitution treatment in Washington State in 2000 demonstrated significant reductions in the average number of days they engaged in heroin use. At entry into treatment, patients reported an average of 25 days of heroin use in the past 30 days. At six months, this was reduced to 6.5 days, and at 12 months, to 5.4 days, representing a 78% decline. More than four out of five patients reported a reduction in the number of days using heroin at the six- and 12-month follow-ups.¹



Providing Methadone Treatment for Opiate-Addicted Supplemental Security Income Recipients Reduces Health Care Costs.

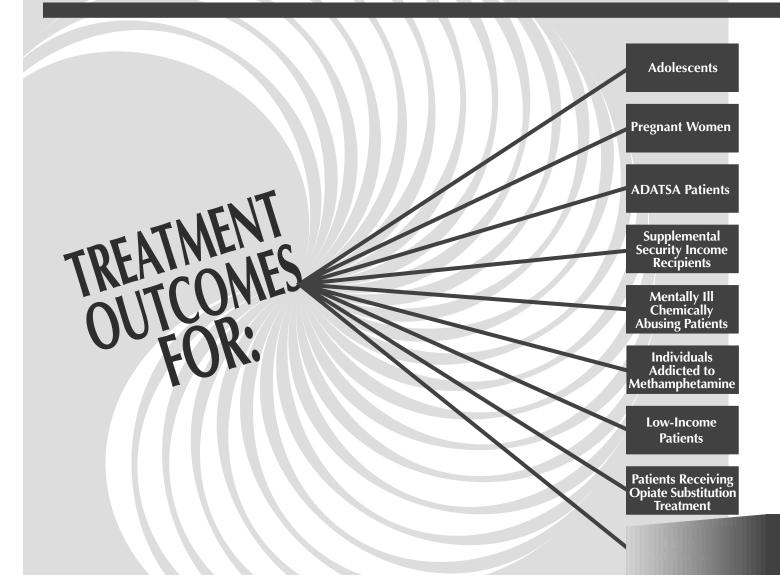


Source: Nordlund, D., et al., "Methadone Treatment for Opiate Addiction Lowers Health Care Costs and Reduces Arrests and Convictions." Olympia, WA: Washington State Department of Social and Health Services, Research and Data Analysis Division, May 2004.

Medicaid-paid medical, mental health, and long-term care costs are significantly lower for Supplemental Security Income (SSI) recipients addicted to opiates who receive methadone treatment, compared to those who remain untreated. Even after the monthly cost of treatment (\$219/month) is included, the net cost savings per patient is \$765 per month, or a potential savings of \$9,180 per treated SSI recipient per year.

Savings are substantial (\$725/month) even for SSI recipients who are opiate-addicted even if they leave treatment with the first 90 days. However, for those who remain in treatment for at least one year, cost offsets rise to \$899 per month per recipient.

Outcomes: The Benefits of Prevention & Treatment

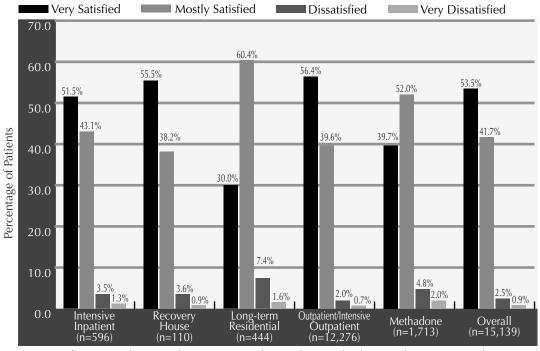


Patient Satisfaction



In 2004, 95% of Adult Patients Receiving Chemical Dependency Treatment Services Reported Overall Satisfaction with the Services They Received.

"In an overall, general sense, how satisfied are you with the services you have received?"



Source: Rodriguez, F., Clients Speak Out 2004: Fourth Annual Statewide Client Satisfaction Survey. Olympia, WA: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2004.

In March 2004, DASA conducted its fourth statewide client satisfaction survey. It was administered at 403 community-based treatment centers to 17,923 patients, or 7% of those receiving treatment in the participating agencies during the week of the survey.

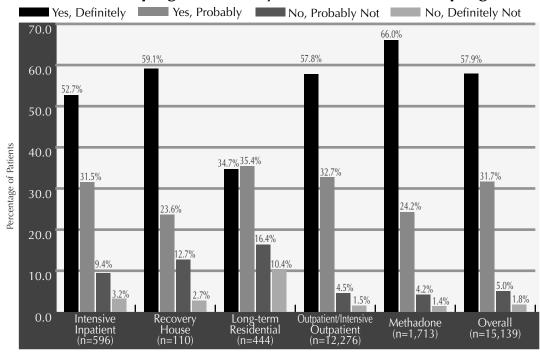
Overall, 95% of adult patients reported they were satisfied with the comfort and appearance of their treatment facility; 82% said they were always treated with respect by staff; 92% rated group sessions as helpful; and 86% reported they found individual counseling to be helpful. Reports of responses to the survey were sent to each of the respective treatment agencies for use in quality improvement activities.

¹ Rodriguez, F., Clients Speak Out 2004: Fourth Annual Statewide Client Satisfaction Survey. Olympia, WA: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2004.

In 2004, 90% of Adult Patients Receiving Chemical Dependency Treatment Services Reported They Would Return to the Same Program If They Needed Help Again.



"If you were to seek help again, would you come back to this program?"



Source: Rodriguez, F., Clients Speak Out 2004: Fourth Annual Statewide Client Satisfaction Survey. Olympia, WA: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2004.

In March 2004, DASA conducted its fourth statewide client satisfaction survey. It was administered at 403 community-based treatment centers to 17,923 patients, or 75% of those receiving treatment in the participating agencies during the week of the survey.

Many patients receiving chemical dependency treatment services require other services as well. Treatment agencies play a key role in assisting patients in identifying and accessing these services. Of those reporting a need for them: 76% of adult patients said their treatment program was helpful in connecting them to legal services; 79% to medical services; 73% to family services; 33% to mental health services; 65% to educational or vocational services; and 55% to employment services.

²⁹⁰

Rodriguez, F., Clients Speak Out 2004: Fourth Annual Statewide Client Satisfaction Survey. Olympia, WA: Washington State Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2004.

Treatment Completion





Treatment Completion Improves Patient Outcomes

As part of the Department of Social and Health Services' pledge to ensure better outcomes for the state residents it serves, the Division of Alcohol and Substance Abuse (DASA) has committed itself to improving completion and retention rates for publicly funded patients receiving chemical dependency treatment.

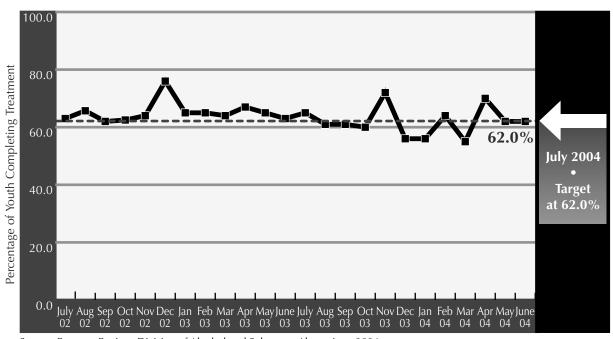
Multiple studies, conducted in Washington State and elsewhere, demonstrate that outcomes following from treatment participation are significantly enhanced when patients complete treatment. For example, relative to patients who did not complete treatment, completers have been found to:

- Have higher employment and wages following discharge from treatment;
- Be arrested and convicted less frequently after discharge;
- Have significantly fewer inpatient medical hospital admissions and are less likely to require emergency medical services after discharge;
- If pregnant, are more likely to have full-term deliveries, babies with higher birth weights, and fewer fetal or infant deaths; and
- Produce higher cost savings to public systems following discharge.

In the pages that follow, results from studies that illustrate the above points are featured. All studies have been conducted in Washington State with publicly funded clients. Taken together, they suggest that improving treatment completion rates is one of the most powerful ways to maximize benefits from the limited public resources available to fund chemical dependency treatment. DASA is now working with researchers, counties, tribes, and both residential and outpatient treatment providers to set targets and incorporate best practices to improve completion rates throughout the state.

Residential Treatment Completion Rates for Youth are at the July 2004 Target of 62%.





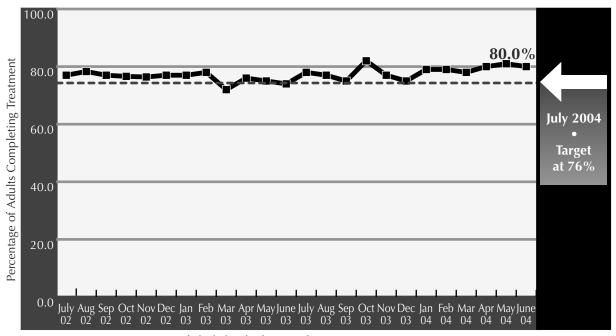
Source: Program Review, Division of Alcohol and Substance Abuse, June 2004.

The Division of Alcohol and Substance Abuse has set a goal of increasing the percentage of low-income and indigent youth who complete publicly funded chemical dependency treatment. Research has demonstrated that treatment completion is closely linked to better outcomes for both adults and youth. Cumulative data from July 2003-June 2004 indicate that 61.8% of low-income and indigent youth completed treatment.

Over the past year, the clinical severity of youth being treated in residential treatment programs has increased. A larger percentage of patients are being admitted to higher and more secure levels of care, and for longer length-of-stay.



Residential Treatment Completion Rates for Adults Now Consistently Exceed the July 2004 Target of 76%.



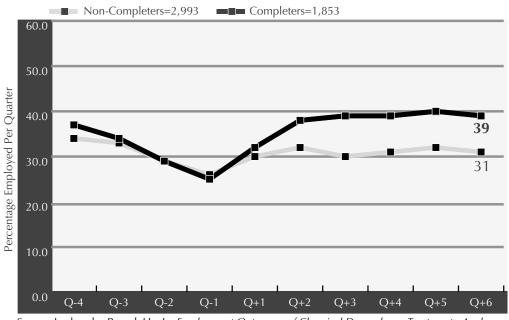
Source: Program Review, Division of Alcohol and Substance Abuse, June 2004.

The Division of Alcohol and Substance Abuse has set a goal of increasing the percentage of low-income adults who complete publicly funded chemical dependency treatment. Research has demonstrated that treatment completion is closely linked to better outcomes for both adults and youth. Cumulative data from July 2003-June 2004 indicate that 78.4% of low-income adults completed treatment.

Treatment Completers are More Likely to Become Employed After Treatment.



Percentage of ADATSA Patients Employed During the Four Quarters Before Admissions and Six Quarters After Discharge from Chemical Dependency Treatment



Source: Luchansky, B. and He, L., Employment Outcomes of Chemical Dependency Treatment: Analyses from Washington State. An Interim Report. 2002.

In a recent study of ADATSA patients¹, employment trends among treatment completers and non-completers were tracked. Prior to treatment, both completers and non-completers experienced declining rates of employment (see Quarters –4 through –1 on graph above). After treatment, employment rates rose for both groups, but the rise was significantly greater for completers: during the sixth quarter after treatment began, 39% of the completers were employed compared to 31% of the non-completers, representing a difference of 25.8%.²

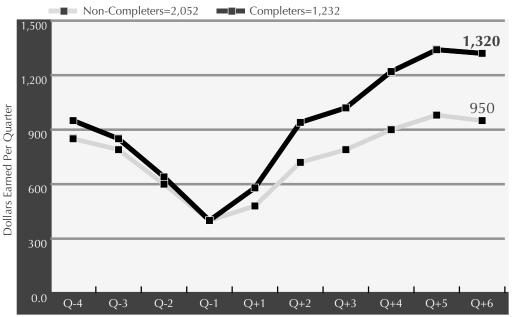
¹ ADATSA is a state-funded program that provides a continuum of care to persons who are indigent and deemed unemployable as a result of alcoholism and/or other drug addiction. ADATSA stands for the legislation that funds this program, the Alcoholism and Drug Addiction Treatment and Support Act.

² Luchansky, B. and He, L., Employment Outcomes of Chemical Dependency Treatment: Analyses from Washington State. An Interim Report. Olympia, WA: Department of Social and Health Services, Division of Alcohol and Substance Abuse, 2002



Treatment Completers Show Pronounced Post-Treatment Wage Increases.

Quarterly Wages for ADATSA Patients During Four Quarters Before Admission and Six Quarters After Discharge from Chemical Dependency Treatment



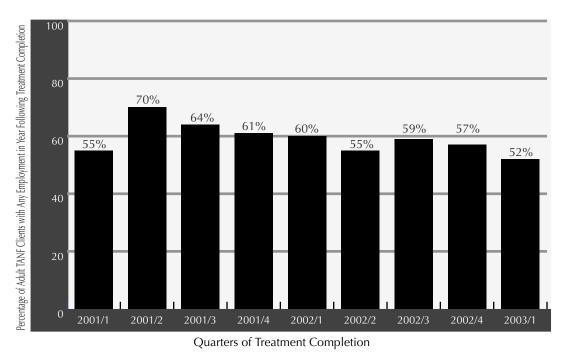
Source: Luchansky, B. and He, L., Employment Outcomes of Chemical Dependency Treatment: Analyses from Washington State. An Interim Report. 2002.

In a recent study of ADATSA patients¹, among those who were employed, it was found that pre-treatment wages for those who completed and those who did not complete chemical dependency treatment were similar. For both groups, wages began to decline four quarters before beginning treatment and continued to decline until treatment began. After treatment, wages rose for both groups. However, the increase in wages for treatment completers was more pronounced than for non-completers. During the sixth quarter after treatment began (see Q+6 on chart), completers earned \$1,316 on average, while non-completers earned \$941, a difference of \$375, representing a 39.8% difference.²

ADATSA is a state-funded program that provides a continuum of care to persons who are indigent and deemed unemployable as a result of alcoholism and/or other drug addiction. ADATSA stands for the legislation that funds this program, the Alcoholism and Drug Addiction Treatment and Support Act.

More than Half of Adult Clients Enrolled in the Temporary Assistance for Needy Families (TANF) Program and Completing Publicly Funded Chemical Dependency Treatment Become Gainfully Employed in the Year Following Discharge.



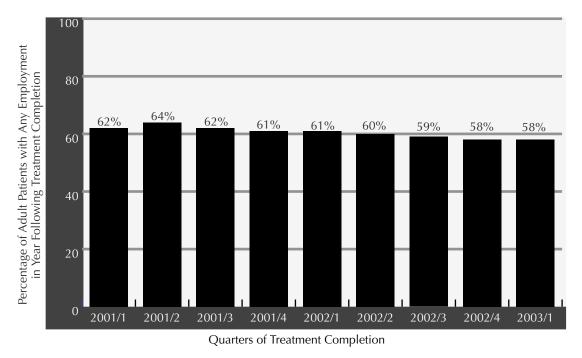


Source: Washington State Department of Social and Health Services, Research and Data Analysis Division, 2004.

This graph indicates that of clients enrolled in the Temporary Assistance for Needy Families (TANF) program who completed chemical dependency treatment in the first quarter of SFY 2003, and did not require further treatment, 52% became employment in the following 12 months. Some 46% of those employed worked more than 20 hours a week; 46% earned wages above the Federal Poverty Level. For TANF clients with substance abuse problems, chemical dependency treatment helps move them toward economic self-sufficiency. However, in difficult economic climates, as this graph indicates, it becomes more difficult for TANF clients to gain employment.



Almost 60% of Adult Patients Completing Publicly Funded Chemical Dependency Treatment Become Gainfully Employed in the Year Following Discharge.



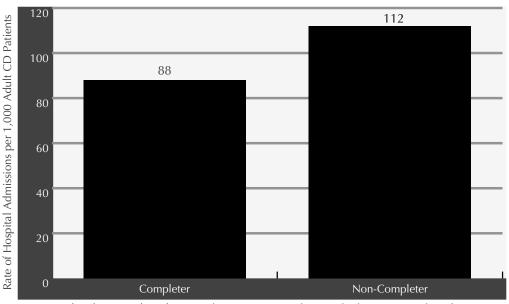
Source: Washington State Department of Social and Health Services, Research and Data Analysis Division, 2004.

This graph indicates that almost three out of five adult low-income who completed chemical dependency treatment in the first quarter of SFY 2003, and did not require further treatment, 58% became employment in the following 12 months. Average monthly wages were approximately \$1,119. More than half of those employed (54%) worked more than 20 hours a week; 59% earned wages above the Federal Poverty Level. For TANF clients with substance abuse problems, chemical dependency treatment helps move them toward economic self-sufficiency.

Treatment Completers Had Lower Hospital Admission Rates Following Chemical Dependency Treatment.



Adjusted Rates of Hospital Admissions per 1,000 Patients in the Year Following a Treatment Episode



Source: Luchansky, B., et al., Substance Abuse Treatment and Hospital Admissions: Analyses from Washington State, 2002.

A study of almost 10,000 adult patients who received publicly funded chemical dependency (CD) treatment in 1995 showed that patients who completed CD treatment were 21% less likely to be admitted to a hospital in the year following discharge compared to patients who did not complete treatment.¹



Completion of Treatment and Treatment Retention are Associated with Reduced Risk of Felony Arrests Among Adults, and Convictions Among Youth.

Research, both in Washington State and elsewhere, has consistently shown that admission to chemical dependency treatment is associated with lower crime rates, fewer arrests, and lower criminal justice costs. More recent studies highlight the benefits of both treatment completion and longer retention in treatment:

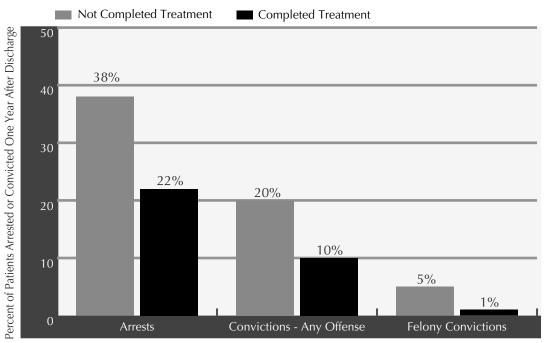
- A 2002 study of over 10,000 adult patients who received publicly funded chemical dependency treatment in 1995 demonstrated that the probability for a felony offense was 21% lower in the following year for patients completing treatment when compared to patients who did not complete treatment. For patients whose treatment episode was greater than 90 days, the probability of a felony arrest was 32% less than for patients with shorter treatment episodes.¹
- A 2003 study of almost 6,000 youth who participated in substance abuse treatment between 1997 and 1998 indicated that patients completing treatment had a 29% reduction in the risk of a subsequent felony conviction, and a 17% reduction in risk of any conviction in the year following discharge, compared to non-completers.²

¹ Luchansky, B., et al., Substance Abuse Treatment and Arrests: Analyses from Washington State (Fact Sheet 4.42). Olympia, WA: Department of Social and Health Services, Research and Data Analysis Division, 2002.

² Luchanski, B., et al., Treatment Readmissions and Criminal Recidivism in Youth Following Participation in Chemical Dependency Treatment. Manuscript being prepared for publication, 2003.

Treatment Completion was Associated with Reductions in Arrests and Convictions Among Supplemental Security Income Recipients.*





Source: Estee, S., & Nordland, D., Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project – 2002 Progress Report.

A study completed in 2003 indicates that Supplemental Security Income (SSI) recipients who completed chemical dependency treatment had lower rates of arrest, convictions for any type of offense, and felony convictions one year after discharge than those who did not complete treatment. Rates of arrest were 42% lower, rates of convictions 50% lower, and rates of felony conviction 80% lower.

^{*} Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify for Social Security Title II benefits. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.



Supplement Security Income Recipients Who Completed Chemical Dependency Treatment Had Lower Medical, Psychiatric, and Nursing Home-Related Costs than Those Who Did Not Complete Treatment.*

Source of Costs ¹	Treatment Completers	Treatment Non-Completers
Medical Costs	-\$380	-\$292
Mental Health Costs		
State Hospital Costs	-\$56	-\$46
Community Psychiatric Hospital Costs	-\$33	-\$11
Nursing Home Costs	-\$65	-\$53

Source: Estee, S., & Nordland, D. Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project – 2002 Progress Report.

In a study of over 7,000 Supplemental Security Income (SSI) recipients who entered chemical dependency treatment, those who completed treatment had lower monthly medical, psychiatric, and nursing home costs, and hence higher monthly cost offsets than those who did not. Medical care expenses for SSI recipients who completed treatment were \$380 lower than the cost of medical care for those who needed chemical dependency treatment but remained untreated. SSI recipients who did not complete treatment also had lower costs, but by only \$292, or 22.4% less.²

^{*} Under the Supplemental Security Income (SSI) program, the federal government provides public assistance grants to aged, blind, and disabled persons with limited means and who do not qualify for Social Security Title II benefits. One cannot qualify for SSI benefits as a result of a disabling condition of alcoholism or drug addiction. People eligible for SSI are automatically eligible for Medicaid.

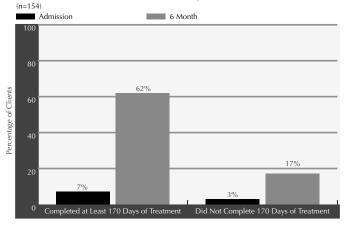
¹ Costs represent the adjusted average monthly per person difference in costs for SSI recipients receiving chemical dependency treatment compared to costs for those who needed treatment but did not get it.

² Estee, S., & Nordlund, D. Washington State Supplemental Security Income (SSI) Cost Offset Pilot Project – 2002 Progress Report. Olympia, WA: Washington State Department of Social and Health Services, Research and Data Analysis, 2003.

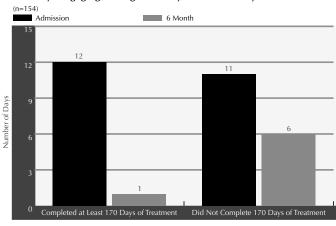
Remaining in Treatment Results in Improved Outcomes Among Patients Receiving Methadone Treatment.

A 2001 study of 154 patients admitted to methadone treatment found that at a six-month follow-up, those who completed at least 170 days of treatment reported substantially higher rates of abstinence from heroin use, fewer days of illegal activity, and substantial decreases in money obtained through illegal activity.

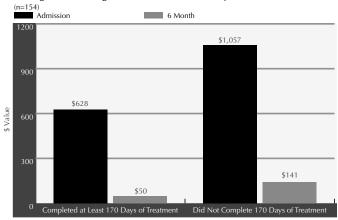
Abstinence from Heroin in Prior 30 Days



of Days Engaging in Illegal Activity in Prior 30 Days

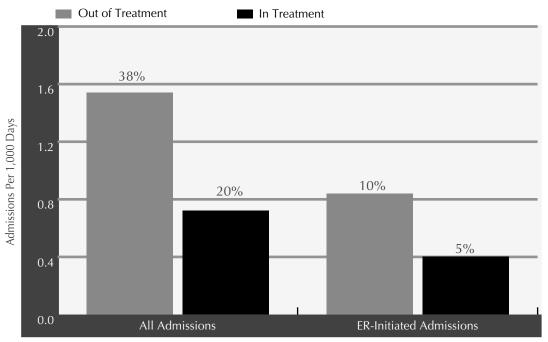


Average \$ from Illegal Sources in Prior 30 Days





Opiate Substitution Treatment Patients are Less Likely to Be Admitted to Hospitals While in Treatment.



Source: Luchansky, B., et al., Substance Abuse Treatment and Inpatient Hospital Admissions for Clients in Opiate Dependency Treatment: Longitudinal Analyses from Washington State. Manuscript being prepared for publication, 2003.

A recent study conducted for the Division of Alcohol and Substance Abuse reported that publicly funded opiate substitution treatment patients were significantly more likely to be admitted to a hospital while they were out of treatment as compared to when they were in treatment. Patients in treatment were 33% less likely to experience a hospital admission than those who left treatment. Most of the hospital admissions came through either the emergency room (56%) or through an urgent care facility (21%). Such acute care services are among the most costly. Medicaid or Medicare paid for 82% of these hospital admissions; only 15% were paid by a private payer. ¹ Thus, retention in opiate substitution treatment results in better health for patients, and lower costs to the public.

Longer Retention in Opiate Substitution Treatment is Associated with Higher Methadone Dose.

	Average Peak Methadone	Average Number of Days in Treatment
Opiate Substitution Treatment Program #1	109 mg/day	284.2
Opiate Substitution Treatment Program #2	83.1 mg/day	193.5

Source: Carney, M., et al., Washington State Outcomes Project: Opiate Study Sample. Final Report. Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 2003.

Longer retention in opiate substitution treatment is associated with better outcomes: less crime and involvement with the criminal justice system, fewer medical hospitalizations and emergency room visits, lower medical costs, fewer psychiatric hospitalizations, and less reliance on public assistance.

A 2003 study of 135 individuals admitted to two Washington State opiate substitution treatment programs found a close association between average peak methadone dose and average number of days in treatment. Patients in the programs where average peak dose was 109 mg/day remained in treatment an average of 90.7 days longer than those in the program where average peak dose was 83.1 mg/day, a difference of 46.8%. In addition, it was found that patients whose peak methadone dose was less than 75 mg/day were significantly more likely to leave treatment prior to 170 days. The mean peak methadone dose for patients who left treatment prior to 170 days was 78.0 mg/day, compared with a peak dose of 104.6 mg/day for those who remained in treatment at least 170 days.

Source: Carney, M., et al., Washington State Outcomes Project: Opiate Study Sample. Final Report. Seattle, WA: University of Washington, Alcohol and Drug Abuse Institute, 2003.